# Subject-dependent Inversion in English: A Corpus-based Investigation\*

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Feng, Yujiao & Kim, Jong-Bok. 2021. Subject-dependent Inversion in English: A Corpus-based Investigation. *Korean Journal of Linguistics*, 46-4, 907-926. Subject-dependent inversion is one of the inverted constructions in which the complement of the copula *be* is preposed to the left of the main verb, whereas the grammatical subject is placed in the postverbal position. The inversion is constrained by the relative discourse familiarity of information represented by the preposed and postposed phrases. In addition, the principle of end-weight also plays a role in the felicity of inversion. This paper reviews some key properties of the predicate inversion in English and investigates their real-life uses with the corpus COCA (Contemporary Corpus of American English). Based on the attested data, the paper also sketches a theoretical direction that can account for its intriguing grammatical properties.

Key words: predicate inversion, information structure, discourse familiarity, end-weight, corpus, question-in-disguise

# 1. Introduction

In English grammar, fronting is a type of focus strategy often used to enhance cohesion and further to provide emphasis. Subject-dependent inversion belongs to fronting as well (Huddleston and Pullum 2002: 1885–1990). Consider the following pair of examples:

- (1) a. Learning to manage their growth with the correct pruning technique is equally important.
  - b. Equally important is learning to manage their growth with the correct pruning technique.

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As seen from the pair, different from (1a), the AP *equally important* in (1b) is fronted or inverted to the subject position, while its subject is postposed to the clause-final position (Birner 1994). The template of Subject-dependent inversion in English can be represented as the following:

(2) [Complement XP] + [(Aux) be] + NP[subject]

In the template above, the complement XP can be AP, PP, VP or NP, and the logical subject postposed in the clause-final position is usually an NP (Schmidt 1980, Kim and Kim 2010). As to the main verb, it can be a simple *be* or a combination of some other auxiliary verb and *be*, as seen from the following attested data:<sup>1</sup>

- (3) a. A striking example would be Helen Keller's legendary flash of insight. (1993 ACAD)
  - b. Added to these costs could be other medical expenses such as co-pays, dental, optical, prescriptions, physical therapy. (2013 NEWS)

As noted, Subject-dependent inversion is also an information-packaging mechanism, which allows the comparatively familiar information to precede the relatively unfamiliar information. The inverted predicative NP in the sentence-initial position is associated with a reference linked to the preceding context. Further, as Birner (1994) and Huddleston and Pullum (2002) point out, the preposed predicate complement in Subject-dependent inversion tends to be discourse-old, while the postposed subject tends to be discourse-new, which allows the noncanonical word order to be felicitous. Consider the following:

- (4) a. Nothing on the walls, with one exception: Tacked over the bed was a yellowed, deckel-edged photograph.
  - b. Standing on the sand is a beach hut built like a mini-mosque.

In both of the examples in (4), the inverted predicative contains a definite

<sup>&</sup>lt;sup>1</sup> The attested examples are from COCA (Corpus of Contemporary American English).

NP (e.g., *the bed* and *the sand*) linked to the previous context, and the subject introduces new information. Further, the information presented by the postverbal subject is new or relatively less unfamiliar to that in the preverbal complement, as seen from the following (Birner 1994):

- (5) A: Hey, mom, have you seen my gym shirt? I'm in a big hurry to get to the bus stop.
  - B: #In the hall closet is your gym shirt. [cf. Your gym shirt is in the hall closet.]

The postposed constituent also tends to be heavy: the postposed subject tends to have more words than the preposed complement, as illustrated by (6) (Schmidt 1980, Arnold et al. 2000, Kim and Kim 2010). In this instance, the adverb *also* in the proposed complement indicates that the information presented by the complement is discourse-old.

(6) In 1983, 40 percent of Uruguayans lived in Montevideo, 37.3 percent of Chileans in Santiago, 34.1 percent of Argentines in Buenos Aires and each of these countries, like Venezuela, was three-quarters urbanized. [Also heavily urbanized] was [Mexico, with 20.1 percent of Mexicans living in the capital region, which is generally regarded now as the world's largest city].

As discussed, Subject-dependent inversion in English displays quite intriguing properties. This paper first reviews key grammatical properties of Subject-dependent inversion in English including information packaging structure, and then reports a corpus investigation of the construction, referring to COCA (Corpus of Contemporary American English). The corpus investigation focuses on the qualitative research of the extracted data. The paper also discusses a theoretical direction to account for the observed properties.

# 2. Basic properties of Subject-dependent inversion

#### 2.1 Syntactic properties

As noted earlier, in Subject-dependent inversion, the logical subject is postposed after the copula *be*, while the canonically post-copular dependent appears in the preverbal position. The category of the inverted expression in the precopular position can be quite flexible, as noted from the following attested data:

- (7) a. [ $_{AP}$  Equally important] is [the fact that it should be possible to collect and thus display the mask]. (2009 ACAD)
  - b. [PP To the right] was [another hallway]. (1994 FIC)
  - c. [VP[en] Stuck to the other side of it ] are [ten alien eggs]. (1997 FIC)
  - d. [<sub>VP[ing]</sub> Lying curled on the rumpled white sheets] was [the untied end of green ribbon]. (2000 FIC)
  - e. [ $_{NP}$  A good Englishwoman] would be [Margaret or Margery]. (2011 FIC)

The preposed dependent needs to be the complement of the copula *be* and further the VP dependent needs to be a nonfinite participle VP.

- (8) a. The fire has become even more unpredictable.
  - b. \*Become more unpredictable has the fire.
- (9) a. The first thing to do is find out if they have brains.
  - b. \*Find out if they have brains is the first thing to do.

When the inverted dependent is a participle VP, it needs to be the highest available VP, as seen from the following contrast (Samko 2014):

- (10) a. Being tried separately from Koike are Nomura and three former executives.
  - b. \*Tried separately from Koike are being Nomura and three former executives.

c. \*Tried separately from Koike are Nomura and three former executives being.

The postcopular NP in canonical order can be either predicational or identificational, as given in (11a) and (11)b, respectively (Rothstein 1983, Heycock and Kroch 1998):

(11) a. Don Jacobson is a freelance writer. (2017 NEWS)b. Tommy is Miriam's husband. (2014 SPOK)

Only those cases where the preposed NP functions as the predicational complement of the copula are inverted ones, since the identificational cases could be taken as noninverted ones. As noted by Partee (1998), the identifying *be* takes two arguments and identifies them as the same object. Changing the places of the two arguments will not cause any differences in meaning even though there is change in what is focused, as in (12b). In the meantime, the output of inverting a predicate complement NP can be understood as a topicalized construction, as illustrated in (12a) (Rothstein 1983):

- (12) a. A freelance writer is Don Jacobson.
  - b. Miriam's husband is Tommy.

What's more, the complement of the identifying *be* needs to agree with *be* with respect to person, number and gender, whereas the predicate complement need not agree with *be* (Heycock and Kroch 1998, Van Eynde 2008). As in (13), the predicational copula needs to agree with the postposed subject NP:

(13) a. A small minority are Presbyterians or Lutherans. (1996 ACAD) b. \*A small minority is Presbyterians or Lutherans.

#### 2.2 Information structure properties

Information status of a constituent can be analyzed either as old or new. There are three relevant notions with respect to old and new information: focus/presupposition, hearer-old/hearer-new, and discourse-old/discourse-new (Prince 1992). The information structure of Subject-dependent inversion has a close tie to discourse familiarity-discourse-old and discourse-new (Huddleston and Pullum 2002). Information familiarity usually depends on information represented by NPs. When an NP refers to an entity which has already been evoked in the preceding stretch of discourse, it is discourse-old information. When an NP evokes an entity that has not appeared in the prior stretch of discourse, it is discourse-new information (Prince 1992, Ward and Birner 2001, Birner 2004). Consider the following example:

(14) The powerful flow of the road, gleaming in the light of moon and stars, takes the viewer in and out of a deep space; deep in the landscape, there is a thatched cottage like those in Van Gogh's "memories of the north." This axis reflects the artist's desire to return north. Contradicting the flow of the road are the cypresses and the vertical format of the canvas, which reinforces and sustains the somber, funereal cypresses; they link earth and Heaven, life and possible afterlife. (1993 ACAD)

As in (14), *the flow of the road* is already mentioned in the prior discourse by *the powerful flow of the road*, and thus it is discourse-old. As to *the cypresses* and *the vertical format of the canvas*, they represent discourse-new information because they are not evoked in the preceding stretch of discourse.

Pronouns also represent discourse-old information. They indicate that the entities they refer to are already evoked in the prior stretch of discourse and thus are salient information (Prince 1992). As illustrated in (15), the pronoun *him* refers to the man called Harmon, who has already been mentioned in the preceding sentence. Therefore, the man Harmon is salient in the context and thus the pronoun *him* is discourse-old:

(15) Harmon slowly opened his eyes. Standing in front of him was a fat man in a business suit, holding a briefcase. (1994 FIC)

Inferable is a third possible status for an entity with respect to discourse (Prince 1992). When some entity is already evoked by a speaker in the discourse, the existence of some other entities is assumed to be easily inferred by the hearer. As in (16), although *the work of the Legislature* is not explicitly evoked by preceding phrases, the information that it represents can be easily inferred from *the lawmakers* in the prior discourse.

(16) Many of the lawmakers returning for the second year of a two-year session face re-election. Looming over the work of the Legislature are dozens of initiatives that could appear alongside them on the ballot in November. (2016 NEWS)

In analyzing the felicity of Subject-dependent inversion, the inferable information can be collapsed with evoked information. That is, both the inferable and evoked information can be taken as discourse-old. In Subject-dependent inversion, the information represented by the preposed phrases tends to be evoked or can be inferred by information in the preceding discourse, whereas the information represented by the postposed phrases are usually not evoked or cannot be inferred by information in the preceding discourse (Birner 1994). The preposed phrase thus tends to be discourse-old, while the postposed one prefers to be discourse-new.

# 2.3 Constraints on the felicity of inversion

The felicity of Subject-dependent inversion is determined by the relative familiarity of information represented by the preposed and postposed phrases (Birner 1994, Birner and Mahootian 1996). The information represented by the preposed constituent should be more familiar in the discourse than or at least as familiar as the information represented by the postposed constituent. As in (17), the logical subject represents new information, while the predicate

complement represents old information that is mentioned in the prior stretch of discourse. When the sentence is processed in an inverted form, it is quite felicitous, as in (17a). However, when the sentence is processed in the canonical word order, it is infelicitous, as in (17b):

- (17) a. In effect, a gigantic fence rising on three sides of the site would create a four-acre enclave. Contained within the enclave would be a landscape of plantings, hard-scaped paths and terraces, interpretive commemoration elements and stands of deciduous trees. (2012 NEWS)
  - b. # In effect, a gigantic fence rising on three sides of the site would create a four-acre enclave. A landscape of plantings, hard-scaped paths and terraces, interpretive commemoration elements and stands of deciduous trees would be contained within the enclave.

The infelicity of (17b) can also be explained by another factor — the principle of end-weight. The principle states that speakers tend to place the heavier part at the end of the clause or sentence in order to maintain the balance of sentence structure and conform to the conventional form of expression (Lesnov 2011). The value of 'heavy' depends on context, but phrases with more words are heavier than those with fewer words and clauses in complicated structure are heavier than those in simple structure. Therefore, in order to achieve a balanced sentence pattern, the relatively longer elements are preferred to be placed at the end of the whole sentence, as in (17a). The infelicity of (17b) demonstrates that the relative heaviness of the subject and the predicate may determine the inversion of the sentence.

# 3. Data findings

To get a better understanding of the grammatical behavior of Subject-dependent inversion and figure out its real-time uses, we have performed a corpus investigation, using the corpus COCA (Corpus of Contemporary American English). When the corpus searches were carried out for this research in 2020,

the corpus contained about 560 million tokens of American English distributed in five registers: spoken, fiction, magazines, newspapers, and academic. Using various string searches (referring to n-gram), We collected a total of 11,051 tokens which can be taken to be Subject-dependent inversion. Of these, we randomly selected 570 examples and did quantitative and qualitative research. The following is what we have observed from these 570 examples.

#### 3.1 Syntactic properties

The syntactic categories of the preposed phrases we identified from the extracted data involve four types: VP[*ing/en*], PP, AP and NP. The frequency of each type is presented in Table 1, which suggests that these four syntactic categories of the preposed phrases are commonly used in Subjectdependent inversion in contemporary American English, as noted in previous literature.

Table 1. Frequency of preposed phrases

Preposed-phrase	VP[ing]	VP[en]	PP	AP	NP	Total
Frequency	150	150	150	100	20	570

The VP-inverted inversion involves two types: present participle-inverted (VP[*ing*]) and past participle-inverted inversion (VP[*en*]), as shown in (18).

- (18) a. Complementing the high field lab will be an infrared free electron laser, which is due to start up next year. (2002 ACAD)
  - b. Affixed to the boat's bow was a spar tipped with a deadly charge of black powder. (2002 MAG)

The inverted PP often represents a direction or location:

(19) a. To the right is a stunning view of Central Park. (2005 MAG)b. At left is a chip that includes a single layer of these molecules in its circuits. (1999 NEWS)

There are also a number of data with nonlocative PP. In (20a) and (20b), both of the two PPs are a combination of the preposition *of* and an abstract noun, which functions as an adjectival predicate:

- (20) a. Of particular importance is the role that health status plays in the relationship between religious attendance and depression. (2008 ACAD)
  - b. Of particular interest is the fact that Northrup makes his home on an Anishinaabe reservation-Fund du Lac in northern Minnesota. (2002 ACAD)

The inverted AP has a tendency to appear in the comparative and superlative degree or to cooccur with adverbs, as seen from their frequencies in the following Table:

Table 2. Frequency of APs by form

AP	Basic form	Comparative	Superlative	Adv+AP	Total
Frequency	33	3	33	31	100

The following includes some of the tokens with the inverted AP:

- (21) a. Also new is the involvement of charities that have little experience in politics and usually focus on helping immigrants with legal advice or housing. (2006 NEWS)
  - b. More important is the correlation between explicit and implicit measures. (2008 ACAD)
  - c. Most notable are food and agricultural processors. (1994 NEWS)

It is difficult to distinguish between NP-inverted ones and those non-inverted ones with an identifying *be*. The postposed NPs of the data are mostly proper nouns. The use of indefinite articles in the preposed NP can indicate that it is a predicate complement (Huddleston and Pullum 2002). The following is one illustrative example from the data:

(22) The reason this calculation is added is that there are many month, statistical zone, and depth combinations in the Gulf of Mexico where both vessels and boats fish but only vessels or boats are interviewed, but not both. [A prime example] would be [Texas where only large vessels are targeted for interview]. (1997 ACAD)

As for the form of postposed phrases in Subject-dependent inversion, Table 3 shows that NP takes up a considerably large proportion. In addition to NP, the postposed subjects can also be an infinitival VP, a *what*-clause, or a *whether*-clause, as examplified in (23):

Table 3. Frequency of postposed phrases

Postposed-phrase	NP	VP[inf]	What-clause	Whether-clause	Total
Frequency	561	7	1	1	570

- (23) a. Hanging around the bottle's neck was an 18-minute DVD. (2005 MAG)b. Of particular interest would be to review the work of Richardson et al. (2003 ACAD)
  - c. Buried deep within the tangle of bio-circuits is what looks like a HUMAN FACE covered with cybernetic tubes and chips. (1994 FIC)
  - d. Of particular interest will be whether Bechler was taking a dietary supplement containing the drug ephedrine, although that might not be known for up to two weeks when toxicology results are made official. (2003 NEWS)

In English, definiteness/indefiniteness is a formal property of NPs. Definite NPs include those marked by a definite article like *the*, demonstrative article like *this*, personal pronoun, or proper noun. Indefinite NPs are those marked by an indefinite article or those introduced by determinative quantifiers like *some* and *any*. According to this property, all the postposed NPs are either definite or indefinite, as shown in Table 4.

Table 4.	Frequency	of N	IPs by	definiteness/indefiniteness
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Туре	Definite NP	Indefinite NP	Total
Frequency	294	267	561

The table shows us that the NP subjects in the postposed position can be either definite or indefinite, and the difference in frequency between the two is relatively small.

#### 3.2 Information structure distribution

To see the information structure of the construction, we annotated the extracted 570 examples for familiarity. Following Birner (1994), the inferable and evoked information, as well as pronominal information, are equally treated as discourse-old, whereas the information that is not mentioned before or cannot be inferred from the preceding discourse is marked as discourse-new. The frequencies of these two variables are calculated and given in Table 5.

Table 5. I	nformation	structure	([S)	pattern	of	the	preposed	XP
	an	d the pos	stpos	ed subje	ct			

IS pattern	Frequency
discourse-old and discourse-new	516
discourse-old and discourse-old	1
discourse-new and discourse-new	53
discourse-new and discourse-old	0
Total	570

According to Table 5, there are four information-structure patterns (with the order of preposed complement XP and postposed subject YP). No case is in the discourse-new and discourse-old pattern, which suggests that the preposed complement is no less familiar than the postposed subject.Each pattern is illustrated by the following examples: (24) a. Discourse-old, discourse-new:

Both Johnson and Jones will face strong challengers in their attempts to accomplish their goals. [Among those challengers] will be [fellow members of the U. S. Olympic Track Team].

b. Discourse-new, discourse-new:

But as soon as I arrived at the venue – a bland hectare of gravel bookended by a mess hall and a rec room – I was greeted by a senior citizen with a waxed moustache, toting two terriers in his golf cart. "Hop in," he said with a folksy grin that was more Kiwanis luncheon than Kool-Aid acid test. "We'll get you set up with a name badge." My host zipped down the aisles between luxury buses. [Absent] were [ramshackle hotboxes bedecked with kaleidoscopic murals of unicorns and Jerry Garcia]. (2008 MAG)

c. Discourse-old, discourse-old:

The horse's hooves slid and he skidded off the end of the dock-SPLASH! Waves rocked the little rowboat and the farmer fell into the water. He was right. The lake was cool. The farmer came up spluttering. The boat was gone. "Who took my boat?" he asked. He looked around and spotted the boat drifting away. [In it] was [the horse]. (COCA 2007 FIC)

The dominant pattern is the order of discourse-old (preposed XP) and discourse-new (postposed YP). As in (24a), the preposed information *challengers* is already evoked by the phrase *strong challengers* in the prior discourse-stretch and thus is discourse-old, while the postposed is neither evoked nor inferable and thus is discourse-new. There are also a number of data with the discourse-new and discourse-new pattern, where both the preposed and postposed phrases are not yet evoked or inferable, as in (24b). Examples like (24c) is the discourse-old and discourse-old pattern. Here *it* refers to the boat. Although both the boat and the horse are mentioned in the preceding discourse, the boat is mentioned more recently and thus *it* represents more familiar information than *the horse*, which allows the felicity of inversion.

To make out the cause of inversion in the data that is not in the discourse-old and discourse-new pattern, a cross-tabulation between discourse familiarity and weight is created as in Table 6. In terms of the principle of end-weight and according to Lesnov (2011), the variable 'weight' can have three values: XP-heavier, YP-heavier and Equal. XP-heavier means that the preposed phrase has more words than the postposed subject, while YP-heavier means that the postposed subject is longer. Equal means that the length of the preposed phrase is the same as that of the postposed phrase.

Familiarity	XP-heavier	YP-heavier	Equal	Frequency
discourse-old,	50	448	18	516
discourse-new	50	440	10	510
discourse-old,	0	0	1	1
discourse-old	0	0	T	1
discourse-new,	1	52	0	53
discourse-new	1	52	U	55
discourse-new,	0	0	0	0
discourse-old	0	0	0	0
Total	51	500	19	570

Table 6. Cross-tabulation: discourse familiarity and weight

The cross-tabulation shows most of the data that are not in the discourse-old and discourse-new pattern are NP-heavier. That is, as to the data whose inversion is not constrained by the relative familiarity of information represented by the preposed and postposed elements, the principle of end-weight may help to constrain them by requiring the heavy subjects to be postposed in the final position and thus help to render the inversion felicitous. For example, in 53 cases, both the preposed and postposed constituents are discourse-new, which do not conform to the constraint that the inverted complement should present more familiar information than the postposed subject does. However, Subjectdependent inversion is still felicitous in these cases. This is because 52 of them have heavy subjects, which help render the clause-final subjects more acceptable.As in (24b), information represented by the preposed elements is no more familiar than the information represented by the postposed elements, but the inversion is still felicitous because of the heavier subject.

#### 4. Discussion and implications

The corpus findings show us that in Subject-dependent inversion, the preposed constituents involve four syntactic categories: VP, PP, AP and NP. The forms of VP are present participle and past participle. PP-inverted inversion has an overlapped part with locative inversion, and in nonlocative Subject-dependent inversion, PP is usually a combination of the preposition of with an abstract noun. In AP-inverted inversion, AP tends to occur in the comparative and superlative degree or to cooccur with an adverb. In NP-inverted inversion, most of the postposed NPs are proper nouns.

With respect to the postposed constituents, nearly all of them are NPs. However, to-infinitive VP and clauses, such as *what*-clauses and *whether*-clauses, can also be postposed as logical subjects. As to NP subjects, in canonical position they tend to be definite and represent old information (Prince 1992). However, in the inversion construction, the difference in frequency between the definite and indefinite NP subjects is not significant. This implies that the postposed subject need not necessarily be definite, and further that definiteness/indefiniteness of the postposed subject does not tell us its information-structure status (Prince 1992, Birner and Ward 1994).

In terms of discourse familiarity, the collected data of Subject-dependent inversion exhibit three information patterns: discourse-old and discourse-new, discourse-new and discourse-new, discourse-old and discourse-old. Most of the data are constrained by discourse familiarity and dominantly follow the discourse-old and discourse-new pattern. However, there are also a substantial number of instances with the other two information-structure patterns. These two patterns, however, follow the principle of end-weight that postposes the heavy subject in the clause-final position so as to render the inversion felicitous.

There are additional points to be considered as for the information structure of the construction. The inverted predicate NP needs to be presuppositional (Moro 1997). Observe the following contrast:

- (25) a. \*A teacher is John.
  - b. An IMPORTANT teacher is John.

As seen in (25a), the inverted predicate NP canonically cannot be indefinite. However, as given in (25b), the inversion of an indefinite NP can be saved when the indefinite NP specifies a prominent example of an individual ('example reading'). The example of 'an important teacher' here fulfills a predicate whose membership is already in question in the discourse (cf. Chen 2003, Schueler 2004). That is, the prior discourse presupposes the proposition 'x is an important teacher.'

In addition, the verb must not represent new information in the discourse. The verbs in the inversion are informationally light in that they represent evoked or inferable information in context and therefore contribute no new information to the discourse. Consider the following:

- (26) a. Immediately recognizable here is the basic, profoundly false tenet.b. Sitting in the hotel dining room is a trim, tanned Californian
- (27) a. From the lips of a cab driver came an enlightened expression.b. East of Cape Kenneth, the toursit trap, lies Heart's Haven.

As shown in these examples, non-copular verbs can appear in inversion only when their lexical content has already been evoked or is inferable from the context (Birner and Ward 1998). As seen in (27), the main verbs *came* and *lies* are acceptable because their lexical content can be inferred from the preceding discourse.

The corpus data we investigated also support the fact that the preposed phrases represent more familiar information than the postposed subject (Birner and Ward 1992, Birner and Ward 1998):

- (28) a. We have complimentary soft drinks, coffee, Sanka, tea, and milk. Also complementary are red and white wine.
  - b. She got married recently, and at the wedding were the mother, the stepmother, and Debbie.

One final point to be noted is that, as suggested by Huddleston and Pullum (2002), the inverted predicate evokes an appropriate open proposition. In (29), the preceding context allows us to infer the open proposition such that 'x

is adding to the problem':

(29) They singled out the difficulty in integrating research and theory in a multidisciplinary field. [Adding to the problem] is [the fact that few areas of research carry the emotional impact that sexuality does].

We suggest that Subject-dependent inversion has a disguise-in-question meaning, which can be attributed to the constructional constraint. That is, the inverted predicate is a question with a variable, and the copula is specificational in the sense that its value is identified by the postcopular subject.

English employs Subject-dependent inversion as a subtype of the Specificational Cleft Construction (e.g., *What is adding to the problem is this fact*), which also serves as a subtype of the Copula Construction (e.g., *The director of the program is John*):

- (30) a. Syntax: Predicate-XP + Copula + Subject-YP
  - b. Semantics/Pragmatics:  $\lambda x[P(x)]$  is y; The XP asks a possible value for the variable 'x' and the postverbal expression offers this value.

The disguise-in-question analysis expects us to build the question from the given context:

- (31) a. This is the first of a series of biennial exhibitions which will include painting, sculpture, photography, installation and video. [Participating] will be [the Fisher Gallery, University of Southern California; the Japanese American Cultural and Community Center].
  - b. They walked carefully across the twins' vegetable garden, picking their way through rows of cabbage, beets, broccoli, pumpkins. [Looming on their left] were [the tall stalks of corn].

In (31a), from the preceding context, we can infer the open proposition such that 'x is participating', whereas in (31b), we can conjecture the proposition 'x is looming on their left'. When it is hard to construct such an open proposition,

we encounter difficulties in building Subject-dependent inversion construction.

#### 5. Conclusion

English Subject-dependent inversion displays quite complex properties on both syntactic structure and information structure. Syntactically, the complement of the verb *be* is preposed in the preverbal position, while the logical subject is postposed in the postverbal position. In terms of information structure, Subject-dependent inversion tends to be in the discourse-old and discourse-new pattern, where the preposed constituent is discourse-old, whereas the postposed constituent is discourse-new. Both relative discourse familiarity and comparative heaviness may put constraints on the felicity of Subject-dependent inversion. Generally, Subject-dependent inversion observes discourse familiarity. That is, the preposed constituent represents more familiar information than the postposed one. Cases escaping from this constraint follow the principle of end-weight. In addition, Subject-dependent inversion has a disguise-in-question meaning that matches with its information structure. The inverted predicate is a question with a variable, and the copula is specificational in the sense that its value is identified by the postcopular subject.

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